

California Drought Update



**For August 18, 2016
by Patrick Ruckert**

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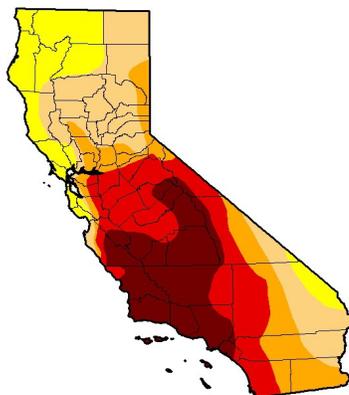
A Note To Readers

I am traveling and so this week's report is an abbreviated one, as is this introduction.

The most important report below is the, I guess, what we can call, if the Water Board had any self-respect, much less honesty, an embarrassing self-exposure. It used to be that flashers would run and hide after doing their deed, but not our Water Board.

The U. S. Drought Monitor for California

**U.S. Drought Monitor
California**



August 16, 2016
 (Released Thursday, Aug. 18, 2016)
 Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D1	D1-D2	D2-D3	D3-D4	D4
Current	0.00	100.00	83.59	59.02	42.80	21.04
Last Week 8/9/2016	0.00	100.00	83.59	59.02	42.80	21.04
3 Months Ago 5/15/2016	5.90	94.50	86.39	63.57	42.99	21.04
Start of Calendar Year 1/1/2016	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year 9/1/2015	0.14	99.86	97.33	92.36	71.08	46.00
One Year Ago 8/16/2015	0.14	99.86	97.35	92.36	71.08	46.00

Intensity
 D0 Abnormally Dry D3 Extreme Drought
 D1 Moderate Drought D4 Exceptional Drought
 D2 Severe Drought

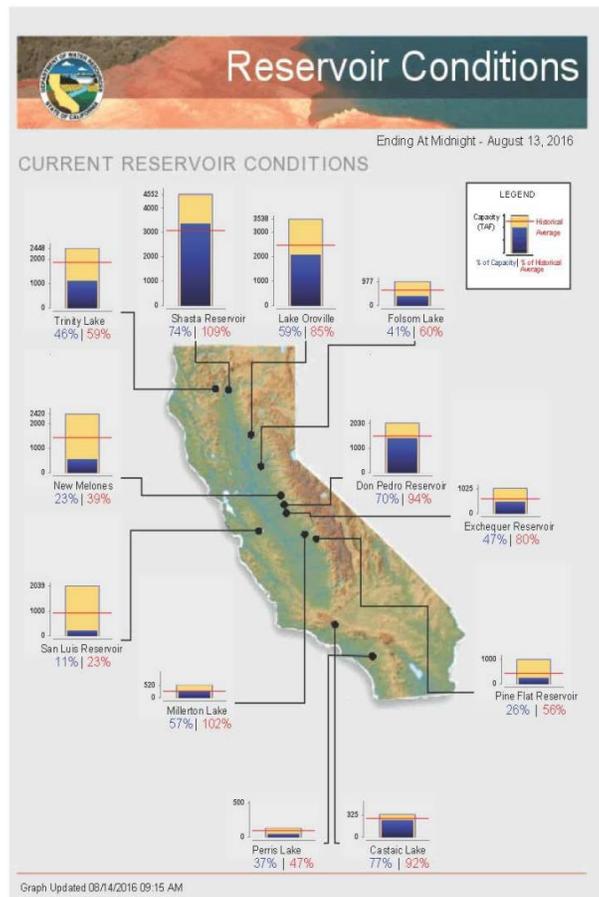
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
 David Miskus
 NOAA/NWS/NCEP/CPC



<http://droughtmonitor.unl.edu/>

The Reservoirs



And It Still Will Make No Difference

The following report underlines the reality of the state's water-supply, while at the same time making a mockery of all the hand-wringing, guilt-throwing, hysteria-inducing mass propaganda that we have been subjected to for the past year. I am sure you all remember the almost dictatorial edict from the governor and the Water Board to the water districts and cities that they must, or “all the water will run out,” conserve up to one-third of what was consumed in 2013.

Well, now, while still urging conservation, all the edicts are gone, the threats are no longer being made, and, apparently, all will be well.

So, what exactly is the real story here?

Some never knew, and others may have forgotten a simple fact of California water utilization. Agricultural uses about 40 percent; about 50 percent is reserved for various environmental reasons; and 10 percent goes to urban use. By saving about 25 percent of what urban areas utilize, a whopping 2.5 percent of total state water utilization is conserved. As the saying goes, that is a drop in the bucket. Or, to quote Shakespeare, “Much Ado About Nothing.”

Thus, while the headline of the report below from the *San Jose Mercury News* of August 17, written by

Paul Rogers, does not make the point that I make, it should at least raise similar questions. I include a few excerpts from the article:

California water saving: 84 percent of agencies choose zero as conservation target

http://www.mercurynews.com/drought/ci_30254471/california-drought-84-percent-water-agencies-choose-zero

Under fire from water agencies who were losing millions of dollars in lost water sales, Gov. Jerry Brown's administration two months ago dropped all mandatory water conservation targets and allowed cities, water districts and private water companies across the state to set their own targets.

Now, the results are in: 343 urban water agencies -- or 84 percent of the 411 largest in the state -- gave themselves a conservation target of zero for the rest of this year.

Economic Damage For 2016

A just released report from the *University of California at Davis* summarizes the damage from drought to the state's agricultural economy for 2016. For those who want the details, the link to entire article is below. I just include a few excerpts here. <https://californiawaterblog.com/2016/08/15/economic-analysis-of-the-2016-california-drought-for-agriculture/>

Economic Analysis of the 2016 California Drought for Agriculture

Posted on [August 15, 2016](#)

by Josué Medellín-Azuara, Duncan MacEwan, Richard E. Howitt, Daniel A. Sumner, and Jay R. Lund

The drought continues for California's agriculture in 2016, but with much less severe and widespread impacts than in the two previous drought years, 2014 and 2015.

Survey work on expected surface water deliveries to agricultural water districts, and public announcement from main water contractors indicate a surface water shortage of 2.6 million acre-foot of water for agriculture during the 2016 irrigation season mostly for the Central Valley. This is roughly 14 percent less than a normal statewide surface water supply for crops. This shortage is reduced with nearly 1.9 million acre-foot of additional groundwater pumping for a net water shortage of 0.7 million acre foot or 2.6% of the estimated applied water in agriculture.

With this water shortage, about 78,800 acres of land could be idled due to drought, a small proportion of California's 9.3 million acres of irrigated crops. Almost all fallowed land due to drought is projected to be on the west side of the San Joaquin Basin which relies heavily on water imports. No significant drought related impacts are expected for livestock and dairies this year as this sector is more affected by market conditions than drought this year. Net water shortages will cost about \$247 million dollars in forgone gross crop revenues plus \$303 million in additional pumping costs for a total of \$550 million in direct costs and 1,815 jobs lost in agriculture due to drought. Region-wide effects which include sectors supporting agriculture face gross revenue losses and households lost income of an estimated \$603 million and 4,700 jobs statewide.

Responding to this report is a posting from the *Westlands Water District and the San Luis Delta-Mendota Water Authority* on August 16:

From the Westlands Water District and the San Luis-Delta Mendota Water Authority:

<https://mavensnotebook.com/2016/08/16/news-worth-noting-nrdc-state-water-board-gives-undeserved-as-on-drought-stress-test-westlands-uc-davis-study-proves-government-caused-drought-far-worse-than-mother-natur/>

Responding to a recently-released [UC Davis study](#), the San Luis & Delta-Mendota Water Authority and the Westlands Water District stated the study proves that failed government policies, not a lack of rainfall and snowpack, are responsible for the widespread water shortages and the fallowing of hundreds of thousands of acres of land.

“Contrary to some mistaken interpretations, the report did not conclude that the water crisis is easing, rather it exposed the terribly broken California water system that is creating long-term consequences for many California communities,” said Johnny Amaral, Deputy General Manager at Westlands Water District. “Even though the report found that 78,000 acres of prime farmland were taken out of production due to drought conditions, hundreds of thousands of acres are being fallowed due to government mismanagement of the state water system. Mother Nature's effect pales in comparison to government's water supply policies.”

Unfortunately, the academic study leaves the impression that conditions have improved for farmers, farmworkers, and farm communities, but the reality is quite different. Some irrigation districts are reporting higher numbers of total land fallowed in 2016, with one district alone fallowing more than 200,000 acres.

San Luis Is This Summer's Poster Child

Last year it was Folsom Lake that was the poster child for a picture of the affect of the drought on the reservoirs. This year it is the San Luis Reservoir. San Luis is so bad, as I reported in mid-July, that a state of emergency was created as the reservoir was on the edge of not being able to supply water at all. Two articles provide some background for both how we got into this situation, and a time-line for the emergency.

The first is from the *San Jose Mercury News* on August 12, written by Paul Rogers: “San Luis Reservoir at lowest level in 27 years.” Some excerpts follow.
http://www.mercurynews.com/drought/ci_30235421/california-drought-san-luis-reservoir-at-lowest-level

The nation's largest off-stream reservoir is high and dry this summer, and it's not really because of the drought. Northern California received its most rain in five years this winter.

Instead, a "perfect storm" of controversial human causes -- from an attempt to save endangered salmon hundreds of miles away, to age-old water rights that give rice growers near Sacramento the water first -- has left the state's fifth-largest reservoir so low that the last time some now-dry areas were exposed to the air, George Bush Sr. was president, Joe Montana was quarterback of the 49ers and the Loma Prieta earthquake hadn't happened yet.

One of the most contentious reasons is the effort to save an endangered fish.

Even though the state's largest reservoir, Shasta Lake, near Redding, is 75 percent full, federal officials reduced the rate this summer at which they would normally release water from it. In a typical year, water would pour out of Shasta, down the Sacramento River to the Delta, and some would be drawn from pumps near Tracy to be put into San Luis, about 75 miles south of the Delta.

But this summer, in an effort to protect endangered winter-run Chinook salmon, the National Marine Fisheries Service required the U.S. Bureau of Reclamation to cut flows from Shasta from roughly 13,000 cubic feet per second to 10,500.

The idea was to preserve plenty of cold water, which sits deep in the Shasta reservoir, so that it could be released steadily throughout the summer at about 52 degrees, helping the endangered fish eggs and young fish survive in the Sacramento River.

But farmers say the bureau and the fisheries service are being overly cautious. They produced charts and graphs to bolster their contentions that cold temperatures can be maintained with less water in Shasta.

"The unending practice of taking water from human use and giving it to fish in hopes of helping the fish is a failed enterprise," said Jason Peltier, executive director of the San Luis & Delta-Mendota Water Authority, which represents San Joaquin Valley farmers. "The fish are not responding at all. At the same time human, social and economic destruction continues to accelerate. Shameful."



This photo of the San Luis Reservoir was taken by Rory Moore on August 10 and published on the My Job Depends on Ag face book group.

The second article, "[LOIS HENRY: The backstory of a water scare you never knew about](http://www.bakersfield.com/Columnists/2016/08/13/LOIS-HENRY-The-backstory-of-water-scare-you-never-knew-about.html)," was published on *bakersfield.com* on August 13. Henry presents the ins and outs of the San Luis emergency. It is a complicated story, and if you wish to really know it, for whatever reason, here is the link. I just include here a short excerpt.
<http://www.bakersfield.com/Columnists/2016/08/13/LOIS-HENRY-The-backstory-of-water-scare-you-never-knew-about.html>

Millions of Californians nearly had their water shut off late last month because the federal government ran out of water — sort of.

Yes, you read that right.

The federal Bureau of Reclamation ran out of water in the San Luis Reservoir and sent shutoff alerts

(giving three days notice) to 26 districts it serves in the northern San Joaquin Valley and Bay Area.

One of those was the Santa Clara Valley Water District, which provides water to about two million customers including a few companies you may have heard of such as Apple and Hewlett Packard.

The shutoffs were narrowly avoided thanks, in part, to some quick water trades courtesy of the Kern County Water Agency and Arvin-Edison Water Storage District.

Yet Another Call for More Storage

I include this item because it does present the broader picture of water storage in the state, and is the best informed one that I have seen recently. The article is by John Kingsbury, the Executive Director of the *Mountain Counties Water Resources Association*, and published on August 11. I include here just a short excerpt. <http://mountaincountieswater.com/2016/08/time-for-more-water-storage/>

Time for more water storage

There are several proposed well-known surface water storage projects being considered; raising Shasta Dam on the Sacramento River, constructing Sites Reservoir and Temperance Flat, and expanding Los Vaqueros and San Luis Reservoirs. In the Mountain Counties Area, there are also several potential water storage projects with regional and statewide public benefits. These regional projects include, Alder Reservoir, Blagen Mill Pond Restoration Project, Centennial Reservoir, Herring Creek Reservoir Expansion, Sierra Pines Reservoir, Sugar Pine Dam Raise, Tuolumne County Water Supply Reliability Project, Upper Strawberry Reservoir, and Wilson Lake Rehabilitation and Meadow Restoration Plan.